MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2022/2023 (TERM ID 2210)

DMG5034 – MANAGEMENT ACCOUNTING

(All Sections / Groups)

9 FEBRUARY 2023
9.00 a.m. – 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 7 pages with 4 questions.
2. Write your answers in the answer booklet provided.
3. Answer ALL questions.

QUESTION 1

Part A

Hesta Motors Industries Berhad is a manufacturing company that manufactures and sells the electric bike. At the beginning of year 2021, the company introduced a new electric bike that are used for sports and fitness known as Witech Bike. The price and costs data for the bike are as follows:

	Witech Bike (RM)
Selling price per unit	350.00
Variable costs per unit*	126.00
Total fixed costs**	1,496,320.00

Note: * Includes all variable production costs, sales and administration expenses
** Includes all fixed production costs, sales and administration expenses

Required

(a) Compute the contribution margin per unit and ratio for Witech Bike using contribution margin approach. *(Note: Show all workings.)* (3 marks)

(b) Compute the break-even in unit and sales using mathematical equation for Witech Bike. *(Note: Show all workings.)* (4 marks)

(c) The Director of Hesta Motors Industries Berhad sets a minimum target income of RM1 million the sales of Witech Bike. Compute the sales required using contribution margin method. *(Note: Show all workings.)* (2 marks)

(d) Based on the answer in (b), if the actual sales of Witech Bike are RM3.6 million, compute the amount for margin of safety. *(Note: Show all workings.)* (1.5 marks)

(e) If the company's costs accountant managed to reduce the costs for Witech Bike, compute the new sales at break-even point for Witech if the contribution margin ratio increased by 1% and the fixed cost reduced to RM1,290,250 using contribution margin method. (1.5 marks)

(f) Provide any **THREE (3)** assumptions of Cost-Volume-Profit (CVP) analysis. (3 marks)

Part B

OTR Transport Sdn. Bhd. is a transportation company providing bus transportation services from Melaka to various states in Peninsular Malaysia. The operation clerk records the total transportation costs incurred for each bus route. The transportation costs incurred includes bus driver's salaries, bus maintenances, toll and parking fees, bus counter rent expenses, food expenses, travel and petrol expenses, bus depreciation expenses, ticket printing expenses and office worker salaries.

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Below are the eight selected bus routes' mileage in kilometer (km) and cost information for two-way trips collected, summarised and reported to the operation manager:

Bus route	Trip distances (in km)	Total transportation costs (RM)	Bus route	Trip distances (in km)	Total transportation costs (RM)
A	235	1,575	**E**	634	3,570
B	165	1,225	**F**	873	4,765
C	186	1,330	**G**	450	2,750
D	310	1,950	**H**	728	4,040

The report is handed to the company's cost accountant to compute the fixed and variable costs to estimate total transportation costs incurred for different bus routes.

Required

(a) Based on the information above, name any **TWO (2)** costs for each costs category under:
   i. Variable costs (1 mark)
   ii. Fixed costs (1 mark)
   iii. Mixed costs (1 mark)

(b) Compute the variable costs per kilometer for each bus trip using high-low method. (2.5 marks)

(c) Using the answer in (b), compute the fixed cost for each trip. (2 marks)

(d) Using your answers in (b) and (c), compute the estimated transportation costs if there is a new bus trip route, **J,** with two way trip distances of 924 km. (2 marks)

(e) Based on your understanding of costs behaviours, state **ONE (1)** costs category that continues to incur even though OTR Transport Sdn. Bhd. temporary closes its business. (0.5 marks)

(Total: 25 marks)

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QUESTION 2

Part A

DTX Production Berhad plans to increase its sales by 10% in year 2023. Based on the marketing data provided by the sales and marketing unit, the forecast for the expected sales in unit and its selling price for each quarter in the year 2023 are as shown below:

Year 2023	Jan - March	April - June	July - Sept	Oct - Dec
Expected sales in unit	200,000	350,000	250,000	200,000
Selling price per unit (RM)	20.00	22.00	22.00	**Y**

Note:
The selling price, **Y** in the fourth quarter is expected to increase by 10% compared to previous quarter.

These data are passed to the production assistant manager for production planning for year 2023. Below are the additional information provided by the production clerk:

i. The company set a policy to maintain minimum 20% of the next quarter year's unit sales as current quarter's ending finished goods to enable the production process to run smoothly in the next quarter.

ii. The ending finished goods for the 4th quarter of year 2022 was 20% of the 1st quarter year 2023 unit sales.

iii. The expected unit sales on the 1st quarter year in year 2024 is 10% higher than the unit sales on the 4th quarter of year 2023.

Required

(a) Compute the new selling price per unit, **Y**. *(Note: Show all workings)* (1.5 marks)

(b) Prepare the sales budget for all four quarters in year 2023. *(Hint: Prepare in proper format showing the total in a year.)* (7.5 marks)

(c) Assume you are the assistant manager. Prepare the production budget for all the four quarters in year 2023 based on the information provided. *(Hint: Provide the total in a year)* (11 marks)

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Part B

Famous Stationeries Store is a medium sized merchandise business selling stationeries at Alor Gajah, Melaka. The owner of the business, En. Yusof was drafting the expected stationeries purchases for the next two consecutive months based on past mid year's business performances:

	February 2023 (RM)	**March 2023 (RM)**
Purchases	16,140	12,500

For each month of the stationeries purchased, 20% normally are cash purchases and remaining balance are credit purchases. Based on its current cash availability, the business managed to pay 50% of its monthly credit purchases in the current month and remaining on the following month.

Required

Prepare the schedules for payments for purchases of stationeries for the month of February and March 2023 if the accounts payable balance on 31 January 2023 was RM4,100. *(Hint: Show all workings)* (5 marks)

(Total: 25 marks)

QUESTION 3

Tricycle Ceramic Industries Berhad is a Malaysian company manufactures customised ceramics tiles from various types of ceramics and exports to overseas. Each type of ceramic tiles produced are divided into several jobs. Below are the details of the three selected jobs from the overall production occurred in the month of June 2022:

Job No.	Opening work in process (RM)	Costs allocation for direct material (RM)	Costs allocation for direct labour (RM)	Estimated machine hours run (in hours)
550	22,000	14,000	18,800	6,000
551	18,000	17,000	14,000	7,000
552	4,000	32,000	10,700	9,000

The company applies manufacturing overhead costs to jobs using the basis of machines hours. For the year 2022, Tricycle Ceramic Industries Berhad estimated that RM7,500,000 of manufacturing overhead cost will incurred and 1,500,000 machines hours are required to run the production in a year.

The following transactions were occurred in the month of June 2022:

i. Raw materials were purchased on account, RM82,000.
ii. Raw materials were requisitioned for the use in production, RM82,000; of which RM63,000 were direct materials.
iii. Cost accrued for the factory labour were RM49,000.

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iv. Time ticket indicated that RM43,500 were direct labour and the remaining is indirect labour.
v. Overhead costs incurred on account were RM46,800.
vi. Prepaid insurance amounted RM8,100 expired during the month; in which, 80% relates to factory operations and 20% relates to selling and administrative activities.
vii. Depreciation charged for the month is RM52,000 consists of 70% relates to factory operations and the remaining relates to selling and administrative activities.
viii. Manufacturing overhead was applied to production. The company worked 22,000 machine hours during the month.

Required

Referring to the information provided,

(a) Compute the predetermine manufacturing overhead rate for the year 2022. *(Hint: Show your workings.)* (1.5 marks)

(b) Prepare journal entries to record the above transactions. *(Hint: Show your workings and omit explanation.)* (12.5 marks)

(c) Based on answers in (b), compute the actual manufacturing overhead occurred and amount of under or over applied of manufacturing overhead. *(Hint: Show your workings.)* (4.5 marks)

(d) If the Job no. 550 was completed in the month of June 2022, compute the cost for each completed tile if 50,000 tiles were produced. *(Note: Answer in 3 decimals.)* (3.5 marks)

(e) Prepare the journal entries for the overall tiles production in June 2022 assuming that:

i. The total manufactured goods costing RM330,000 are compiled from various job cost sheet that are completed during the month.

ii. A partial of finished goods costing RM97,000 were sold on account at 30% above costs. (3 marks)

(Total: 25 marks)

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QUESTION 4

Part A

QQ Electronics Berhad is a local company manufactures and supplies cordless kettle to other famous brands companies in Malaysia, varies from 2.5 liters to 5 liters at minimum 1,000 units per order.

Below are the current price and standard costs set by the company for each batch of 1,000 units of 5 liters cordless kettle:

Sales price	RM68,000
Variable manufacturing costs*	34,000
Fixed manufacturing overhead costs	18,000

*Note: Consist of 40% direct material, 40% direct labour and 20% variable manufacturing overhead costs.

The company received a proposal to sell to an oversea company for 5,000 units of 5 liters cordless kettle at special price of RM58 each. The Sales Manager insisted that the company should accept this order as an opportunity to penetrate international market and confidently stated that it will not affect the local market sales and production capacity. The Managing Director of QQ Electronic Berhad was reluctant to accept the proposal because worried that the company will not meet the targeted net income for the current year.

Required

(a) Assume you are the Finance Manager of QQ Electronics Berhad. Prepare a schedule reflecting an incremental analysis of this proposal and indicate the impact of accepting this order to the company's targeted net income. *(Note: Show all workings)* (5.5 marks)

(b) The variable manufacturing cost are expected to increase by RM1,000 for each batch of 1,000 units of 5 liters cordless kettle due to export, shipping and custom fee charges if QQ Electronics Berhad accepted the proposal:

i. Compute the total costs incurred for 5,000 units of cordless kettles sold to the oversea company. (1.5 marks)

ii. Based on your answer computed above, should the Managing Director of the company accept the proposal or rejects? Do provide **ONE (1)** explanation to your answer. *(Hint: Show your computation.)* (2 marks)

iii. Referring to your answer in b(ii), if the company set a minimum net income of 10% for each sale, will the Managing Director accept the proposal or rejects? Compute and explain to support your answer. (2 marks)

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(c) Based on the costs information given, which cost is considered not relevant under incremental analysis? Why? (1 mark)

Part B

Healthy Fresh Factory Berhad is one of the suppliers of dairy products in Malaysia. Given are the details of the cost and quantity incurred for 10,000 bottles of yogurt drinks produced in the month of August:

Type of costs incurred	Direct Materials	Direct labour	Manufacturing overhead
Total actual cost incurred (RM)	36,000	38,400	84,000
Total quantity	12,000 liters*	2,400 hours	N/A

* Note: Total liters of pasteurised milk purchased in August 2022 and only 80% are used in production.

On 1 August 2022, the new production manager, Mr. William Tan, wants to measure the efficiency and effectiveness of the current production performance of the yogurt drink production. Mr. Lee, the management accountant prepared a standard costs and quantity as benchmark shown below:

	Standard costs (RM)	**Standard quantity (per bottle)**
Direct Material	3.60	1.1 liters
Direct Labour	15.00	0.25 hours
Manufacturing overhead*	34.00	0.25 hours

* Note: The manufacturing overhead costs are computed based on predetermined overhead rate based on direct labour hour.

Required

Based on the details of yogurt drinks production in the month of August 2022, compute the variances for:

(a) Direct material price (2 marks)

(b) Direct material quantity (3 marks)

(c) Direct labour price (3 marks)

(d) Direct labour quantity (2.5 marks)

(e) Total overhead (2 marks)

(f) In your opinion, state whether the yogurt drink production performed efficiently and effectively or not based on your answer from (a) to (e). (0.5 marks)

(Total: 25 marks)

End of Paper